



Apple Supplier Responsibility

2012 Progress Report



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Apple and Supplier Responsibility

Apple Supplier Code of Conduct

The Apple Supplier Code of Conduct spells out responsible practices in the following areas:

- Labor and human rights
- Worker health and safety
- Environmental impact
- Ethics
- Management systems

Learn more about Apple and Supplier Responsibility, including the entire Code, at www.apple.com/supplierresponsibility.

Apple is committed to driving the highest standards for social responsibility throughout our supply base. We require that our suppliers provide safe working conditions, treat workers with dignity and respect, and use environmentally responsible manufacturing processes wherever Apple products are made.

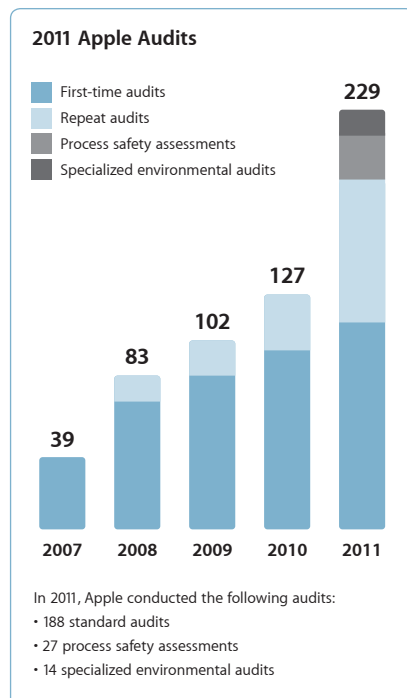
Our suppliers must live up to Apple's Supplier Code of Conduct as a condition of doing business with us. Drawing on internationally recognized standards, our Code lays out Apple's expectations in the areas of labor and human rights, worker health and safety, the environmental impact, ethics, and management systems. We insist that our manufacturing partners follow this Code, and we make sure they do by conducting rigorous audits with the help of independent experts. If manufacturers don't live up to our standards, we stop working with them.

Apple's audit program reaches all levels of our supply chain, including final assembly and component suppliers. We continue to expand our program to reach deeper into our supply base, and this year we also added more detailed and specialized audits to address safety and environmental concerns.

We know that finding and correcting problems is not enough. Apple-designed training programs educate workers about local laws, their fundamental rights as workers, occupational health and safety, and Apple's Supplier Code of Conduct. Today there are more than one million people who know their rights because they went to work for an Apple supplier.

We are always looking for ways to make our program even stronger and more transparent. Apple recently became the first technology company accepted by the Fair Labor Association (FLA), and we look forward to working with them. While we have worked with third-party auditors for several years, Apple will also open its supply chain to the FLA's independent auditing team, who will measure our suppliers' performance against the FLA's Workplace Code of Conduct and the results will appear on their website. It's a level of transparency and independent oversight that is unmatched in our industry.

In addition to this report, we are publishing a list of Apple's leading suppliers on our Supplier Responsibility website. These 156 companies account for more than 97 percent of what we pay to suppliers to manufacture our products.



Other highlights of this year's report include:

- Apple's Supplier Responsibility team conducted a total of 229 audits—an 80 percent increase over 2010. More than 100 of these were at factories that we had not audited before. Facilities where we conduct repeat audits consistently show fewer violations, and the vast majority improve their audit scores year-over-year.
- Apple's audits have always checked for compliance with environmental standards. This year, in addition to our standard audits, we conducted specialized environmental audits at 14 suppliers in China to address specific concerns. Our team brought in third-party environmental engineering experts who discovered a number of violations. We have been working with our suppliers to correct these issues, and we will continue to build on this program of specialized environmental audits in the coming year.
- Apple's worker empowerment program reached a major milestone as the one-millionth participant completed training this year. Through this program, workers learn about our Code of Conduct, their rights as workers, occupational health and safety standards, and more.
- We expanded Apple's Supplier Employee Education and Development (SEED) program to all final assembly facilities. This program offers workers the opportunity to take free classes on a range of subjects including finance, computer skills, and English. More than 60,000 workers have taken one or more of these professional development courses. The curriculum continues to expand, and we have partnered with local universities to offer courses that employees can apply toward an associate degree.
- Continuing our efforts to protect the rights of workers who move from their home country to work in our suppliers' factories, we increased audits in Malaysia and Singapore, countries known to be destinations for foreign contract workers. As a result, suppliers reimbursed \$3.3 million in excess foreign contract worker fees, bringing the total that has been repaid to workers since 2008 to \$6.7 million.

In this report, you will find more information about our 2011 audit results and corrective actions.

Apple's Auditing Process

Apple ensures our suppliers comply with the Supplier Code of Conduct through a rigorous program of onsite audits at our suppliers' facilities. An Apple auditor leads every audit, supported by local third-party auditors. Each of these experts is thoroughly trained to use Apple's detailed protocol and to assess requirements specified in our Code.

During the audit, Apple cross-references data from multiple sources. We review hundreds of records and conduct physical inspections of manufacturing facilities as well as factory-managed dormitories and dining areas. We also conduct interviews with workers and managers in relevant functional areas.

Our auditors grade the facility's level of compliance with every line item in the Code—more than 100 specific areas. At the same time, we evaluate the strength of the underlying management systems and identify areas for improvement. Management systems include policies and procedures, clear roles and responsibilities, and training programs for workers, line supervisors, and managers.

Surprise audits

In addition to regularly scheduled audits at our suppliers, we conduct a number of surprise audits every year. A surprise audit is when our team visits a supplier unannounced and insists on inspecting the facility and meeting with employees immediately. All surprise audits must begin within the hour of our arrival. During our regular audits, we may also ask a supplier to immediately show us portions of a facility that are not scheduled for review. With a combination of regular audits and unannounced audits, we're working to make sure our suppliers are not just showing us what they want us to see.

Every year, we audit all final assembly manufacturers. We also inspect a number of facilities deeper in our supply chain to make sure they are complying with our standards. We select these suppliers based on a number of factors including the country in which the facility is located, past audit performance, and the type of work performed at the facility. We audit the suppliers with the highest risk factors, where our findings and resulting action plans can make the biggest difference to the workplace, workers, and the environment.

Apple reviews all audit findings with the facility's senior management team. When a violation is found, we require the facility to implement a corrective action plan that addresses the specific violation, as well as the underlying management system. We drive for the implementation of all corrective and preventive action plans within 90 days after the audit findings.

Apple considers the most serious breach of compliance to be a core violation. Core violations include underage or involuntary labor, falsification of audit materials, worker endangerment, intimidation or retaliation against workers participating in an audit, and significant threats to the environment. All core violations must be remedied immediately, sometimes with the help of expert consultants. Every year, we reaudit all suppliers where core violations occurred.

Apple's goal is that every supplier complies with our Code. We perform a verification audit to confirm that actions have been resolved, and we collaborate with the supplier until issues are fully addressed. However, if a supplier's actions do not meet our demands, Apple will terminate the business relationship.

Labor and Human Rights

Apple Supplier Code of Conduct: Labor and human rights

The Apple Supplier Code of Conduct requires that suppliers carry out responsible practices in the following areas to uphold the human rights of workers:

- Antidiscrimination
- Fair treatment
- Prevention of involuntary labor
- Prevention of underage labor
- Juvenile worker protections
- Working hours
- Wages and benefits
- Freedom of association

Apple requires our suppliers to uphold the human rights of workers and treat them with dignity and respect. We go beyond industry standards to be sure that workers understand their rights and that our suppliers comply fully in enabling workers to exercise those rights. Apple's efforts in this area also include the prevention of involuntary labor, underage labor, and excessive working hours, and the use of conflict-free minerals.



Workers at an Apple supplier facility in Shanghai assemble parts for the MacBook Pro.

Audit Results

Each year, Apple audits suppliers in eight areas relating to labor and human rights. We look for compliance of both their practices and management systems.

Labor and human rights 2011 audit data

Category	Practices in compliance	Management systems in place
Antidiscrimination	78%	61%
Fair treatment	93%	76%
Prevention of involuntary labor	78%	72%
Prevention of underage labor	97%	83%
Juvenile worker protections	87%	74%
Working hours	38%	38%
Wages and benefits	69%	64%
Freedom of association	95%	91%
Overall Compliance	74%	67%

Category percentages represent the average across all facilities of the line items scored under that category. Overall Compliance percentages are the average of every line item in every category.

Below are the issues and Apple responses for the standard audits in the labor and human rights category.

2011 labor and human rights audit issues and responses

Antidiscrimination	
Apple's Code protects against discrimination on the basis of race, color, age, gender, sexual orientation, ethnicity, disability, religion, political affiliation, union membership, national origin, and marital status, and prohibits pregnancy tests or medical tests for discriminatory use.	
Issues	Apple response
18 facilities screened job candidates or current workers for hepatitis B, and 52 facilities lacked policies and procedures that prohibit discrimination based on results of medical tests.	We classified these practices as discrimination—even if permissible under local laws. At our direction, the suppliers have stopped discriminatory screenings for medical conditions or pregnancy. We also required them to establish clear policies and procedures to prevent recurrence.
24 facilities conducted pregnancy tests, and 56 facilities did not have policies and procedures that prohibit discriminatory practices based on pregnancy.	

Working hours

Apple's Code sets a maximum of 60 work hours per week and requires at least one day of rest per seven days of work, while allowing exceptions in unusual or emergency circumstances.

Issues	Apple response
<p>93 facilities had records that indicated more than 50 percent of their workers exceeded weekly working hour limits of 60 in at least 1 week out of the 12 sample period.</p> <p>At 90 facilities, more than half of the records we reviewed indicated that workers had worked more than 6 consecutive days at least once per month, and 37 facilities lacked an adequate working day control system to ensure that workers took at least 1 day off in every 7 days.</p>	<p>We began weekly tracking of working hours at facilities where excessive work hours were commonplace. We also required facilities to make changes to their work shifts and hiring to drive compliance. We hired a consultant to provide additional training to facilities on factory planning to avoid excessive work hours.</p>

Wages and benefits

Apple's Code requires suppliers to pay all workers with wages and benefits adequately and timely as required by applicable laws and regulations, and prohibits using deductions from wages as a disciplinary measure.

Issues	Apple response
<p>42 facilities had payment practice violations, including delayed payment for employees' wages and no pay slips provided to employees.</p>	<p>We required facilities to pay employees in a timely manner as required by laws and regulations and to provide pay slips to employees. We also required facilities to strengthen their current systems to prevent recurrence.</p>
<p>68 facilities did not provide employees adequate benefits as required by laws and regulations, such as social insurance and free physical examinations. 49 facilities did not provide employees with paid leaves or vacations.</p>	<p>We required facilities to provide adequate benefits stipulated by laws and regulations, including social insurance to all employees, free physical examinations, and paid leaves and vacations. We also required facilities to strengthen their current systems to prevent recurrence.</p>
<p>67 facilities used deductions from wages as a disciplinary measure.</p>	<p>While disciplinary pay deductions are legal in some countries, they are a violation of Apple's Supplier Code of Conduct. We required facilities to repay employees' deducted wages and strengthen their management systems to prevent recurrence.</p>
<p>108 facilities did not pay proper overtime wages as required by laws and regulations. For example, they did not provide sufficient overtime pay for holidays.</p>	<p>We required facilities to repay employees due wages from historical miscalculations and change their current payment system to prevent recurrence.</p>

Core Violations

In addition to issues found in our standard audits, our supplier responsibility program discovered the following core violations in supplier labor and human rights practices. When a core violation is found, suppliers are put on probation and required to immediately address the violation. Every year, we reaudit all suppliers with core violations. The following chart shows the core violations and the actions we required in response.

2011 labor and human rights core violations and actions

Facilities	Violation	Apple Response
Involuntary labor		
2 facilities	Repeat offenders	We terminated business with one supplier and are correcting the practices of the other supplier.
15 facilities	We discovered foreign contract workers who had paid excessive recruitment fees to labor agencies.	We required suppliers to reimburse any fees that exceeded Apple's limits. In 2011, \$3.3 million was reimbursed, bringing the total that has been repaid to workers since 2008 to \$6.7 million.
Underage labor		
5 facilities	We discovered a total of 6 active and 13 historical cases of underage labor at 5 facilities. In each case, the facility had insufficient controls to verify age or detect false documentation. We found no instances of intentional hiring of underage labor.	We required the suppliers to support the young workers' return to school and to improve their management systems — such as labor recruitment practices and age verification procedures — to prevent recurrences.

Educating Indonesian workers

By educating potential contract workers, Apple is working to prevent involuntary labor before it happens. Apple partnered with nongovernmental organizations (NGOs) and local suppliers in North Sumatra, a province of Indonesia, to help residents understand the recruiting process for foreign contract workers and their rights in the workforce. Through a print and radio campaign, we reached thousands of people in communities with historically high rates of migrating workers.

Labor Initiatives

Ending Indentured Migrant Labor

Some of our suppliers work with third-party labor agencies to hire contract workers from countries such as the Philippines, Thailand, Indonesia, and Vietnam. These agencies, in turn, may work through multiple subagencies in the hiring country, the workers' home country, and, in some cases, all the way back to the workers' home village. By the time the workers have paid all fees across these agencies, the total cost can equal many months' wages, forcing workers into debt.

Apple views recruitment fee overcharges as debt-bonded labor, or involuntary labor, which is strictly prohibited by our Code. We limit recruitment fees to the equivalent of one month's net wages and require suppliers to reimburse overpaid fees for all foreign contract workers in their facilities, including workers not assigned to Apple projects.

Continuing our efforts to protect the rights of workers who move to work in factories outside their home country, we expanded our audits to 28 suppliers in Malaysia and Singapore. We also delivered comprehensive training to 67 human resources managers, covering all Apple supplier facilities in Malaysia and many in Singapore.

As a result of our efforts, suppliers reimbursed \$3.3 million in excess foreign contract worker fees, bringing the total to \$6.7 million repaid to workers since 2008. To the best of our knowledge, Apple is the only company in the electronics industry that mandates reimbursement of excessive recruitment fees.



An independent auditor checks identification and other documents to verify the age and status of workers at a facility in Shanghai. Suppliers are required to maintain all relevant documentation and to produce it during audits.

Preventing Hiring of Underage Workers

Apple does not tolerate any instance of underage labor. Whether we discover active workers or historical cases (workers who had either left or had reached legal working age by the time of the audit), we classify these as core violations. Apple demands immediate corrective actions and requires suppliers to fix their management practices to prevent future occurrences.

We also require suppliers to return underage workers to school and finance their education through our Child Labor Remediation program. Under this program, children returned to school are entitled to free education, continuing income at the same level they received when they were working, and their choice of schools. We work with parents and guardians to design specific educational programs to meet each child's needs.

To strengthen supplier hiring systems and safeguard them against future underage hiring, we issued a new standard on Prevention of Underage Labor. The standard requires suppliers to maintain robust documentation and age verification procedures, personnel records, and systems for communicating labor policies across their facilities and with third-party recruiters. The standard also holds our suppliers accountable for agencies and schools providing workers to them. We broadened our program to train suppliers in implementation of the new standard, delivering training to staff at 200 suppliers.

This year, our audits of final assembly suppliers found no cases of underage labor. While we are encouraged by these results, we will continue regular audits and go even deeper into our supply chain to ensure that there are no underage workers at any Apple supplier.

Addressing Excessive Work Hours

We continue to address excessive working hours, and this has been a challenge throughout the history of our program. While this problem is not unique to Apple, we continue to fight it. Apple limits factory working hours to a maximum of 60 work hours per week and requires at least one day of rest per seven days of work, except in emergencies or unusual circumstances.

The reasons behind excessive work hours vary, but they include inadequate shift planning, failure to prepare for changing demand or employee attrition, lack of accountability by management, and inadequate oversight when the same employee works for multiple business groups or customers.

We began weekly tracking of 110 facilities where excessive work hour violations were commonplace. Additionally, we are working with industry experts on a working hours reduction program that combines training, management consultation, and verification of working hour systems and practices. While the problem is complex, it is also manageable. Reducing excessive overtime is a top priority for our supplier responsibility program in 2012.

What is a “conflict mineral”?

The mining of columbite-tantalite, cassiterite, wolframite, and gold—which are refined into tantalum (Ta), tin (Sn), tungsten (W), and gold (Au), respectively—is believed to fuel political strife and human rights violations in the Democratic Republic of Congo (DRC) and neighboring regions. Metals that are mined and smelted from a process that is not certified as “conflict-free” thus constitutes a violation of human rights. These metals are required in small quantities for manufacturing of electronics components found in automotive, household, communications, and computing devices, as well as in non-electronics industries.

Conflict-Free Sourcing of Extractives

Apple’s commitment to social responsibility extends to the source of raw materials used in the manufacturing of our products. We require that our suppliers only use materials that have been procured through a conflict-free process and from sources that adhere to our standards of human rights and environmental protection.

Apple is taking multiple steps to tackle this challenge. We are working with the Electronics Industry Citizenship Coalition (EICC) and the Global e-Sustainability Initiative (GeSI) in an industry-wide effort to train and certify smelters of these metals as being conflict-free through a rigorous independent third-party audit process aligned with the Organisation for Economic Co-operation and Development (OECD) guidelines. These audits include a comprehensive review of business and procurement systems as well as inspection of documentation of raw material purchases and inventory to ensure the absence of conflicted minerals. As the EICC/GeSI initiative completes smelter audits in tantalum, tin, tungsten, and gold, we will require our suppliers to source from these conflict-free certified smelters.

Apple was one of the first major electronics companies to completely map its supply chain in order to trace the materials used in our products back to their source. Since we began this effort, we have identified 218 Apple suppliers that use tantalum, tin, tungsten, or gold to manufacture components for Apple products and the 175 smelters they source from, broken out as shown in the following table.

Tantalum, tin, tungsten, and gold in the Apple supply chain

	Tantalum	Tin	Tungsten	Gold
Suppliers using metal in components of Apple products*	41	179	58	169
Smelters used by these Apple suppliers	15	58	38	87

*Many of our suppliers use more than one metal.

In partnership with fellow EICC and GeSI member companies, we are also working on an outreach program to train management at smelters about the need for conflict-free sourcing of raw materials and in the EICC/GeSI certification process. To date, more than 34 smelters have received onsite training and consultation through this endeavor.

For additional information regarding the conflict-free smelter certification program, please reference www.eicc.info/extractives.shtml; for more information regarding global guidelines, please consult www.oecd.org.

Worker Health and Safety

Apple Supplier Code of Conduct: Worker health and safety

The Apple Supplier Code of Conduct requires that suppliers carry out responsible practices in the following areas to assure worker health and safety:

- Occupational injury prevention
- Prevention of chemical exposure
- Emergency prevention, preparedness, and response
- Occupational safety procedures and systems
- Ergonomics
- Dormitory and dining
- Health and safety communication

Apple believes that health and safety are a fundamental part of every worker's rights. We require our suppliers to create safe working conditions and a physically and mentally healthy work environment, upholding the standards in our Code.

Our health and safety program starts with standard audits as well as occupational health and safety training throughout our supplier base. Audits can result in various noncompliance findings, such as workers not wearing appropriate personal protective equipment, lack of first-aid supplies and fire detection equipment, or inadequate exit paths for emergency evacuations. More serious violations in the past have also included exposure to chemicals because of poor ventilation and workers performing activities at dangerous heights without guardrails or safety harnesses.

Sometimes we discover worker health and safety issues that are not covered by our regular audits. We dig deeper to understand the cause of the problem and, in some cases, hire experts to conduct specialized assessments. The results of these assessments have led us to develop new standards for our suppliers to follow.

In 2010, Apple worked with Foxconn to launch an employee assistance program (EAP) at its facility in Shenzhen, China. Workers there now have access to free psychological counseling, including a 24-hour hotline, to get advice on their personal and professional concerns. Over the past year, we began working with three more suppliers to establish EAPs at their largest facilities, customized to meet the needs of their workers.

In addition to counseling services, these EAPs help build support networks and arrange social activities for workers. The programs are designed by mental health experts who specialize in issues that are common among workers in China.



A worker using a laser etching machine wears a protective mask and safety goggles at a facility in Chengdu, China. Suppliers are required to provide workers with protective gear and ensure that they are properly trained on all relevant safety standards.

Audit Results

Each year, Apple audits suppliers in seven areas relating to worker health and safety. We look for compliance of both their practices and management systems.

Worker health and safety 2011 audit data

Category	Practices in compliance	Management systems in place
Occupational injury prevention	65%	59%
Prevention of chemical exposure	86%	81%
Emergency prevention, preparedness, and response	75%	69%
Occupational safety procedures and systems	77%	74%
Ergonomics	66%	52%
Dormitory and dining	78%	75%
Health and safety communication	84%	78%
Overall Compliance	76%	71%

Category percentages represent the average across all facilities of the line items scored under that category. Overall Compliance percentages are the average of every line item in every category.

Below are the issues and Apple responses for the standard audits in worker health and safety practices.

2011 worker health and safety audit issues and responses

Occupational Injury Prevention	
Apple's Code requires suppliers to provide a safe work environment, to eliminate physical hazards wherever possible, and to establish administrative controls that reduce risks.	
Issues	Apple response
126 facilities did not have the appropriate administrative documentation or approval for at least one item in the health and safety protocol. Examples included workers who performed certain tasks without the legally required licenses, expired elevator permits, and lack of labeling of maximum load for shelving.	We required facilities to obtain the required government approval and to ensure that workers received appropriate training, licenses, and certifications as required by law.
78 facilities had at least one instance where a workstation or a machine was missing the appropriate safety device such as a gear guard, pulley guard, or interlock.	We required facilities to equip all substandard machines with adequate safety mechanisms and conduct regular maintenance to prevent injuries.
58 facilities had workers who were not wearing appropriate personal protective equipment (PPE), such as earplugs, safety glasses, and dust masks. In some instances, the facility had not provided the appropriate safety equipment. In others, the workers neglected to use the equipment or were using it improperly. Also, 72 facilities lacked procedures for PPE management.	We required facilities to implement adequate PPE programs, by providing comprehensive work environment assessments and developing clear PPE rules. We also required them to educate both workers and supervisors on the risks of not wearing required PPE while performing their work and to hold supervisors accountable for ensuring that workers made proper use of PPE.

Emergency prevention, preparedness, and response

Apple's Code requires facilities to anticipate, identify, and assess emergency situations and to minimize their impact by implementing emergency plans and response procedures.

Issues	Apple response
119 facilities had deficiencies in their egress safety procedures, such as narrow corridors and poorly marked or inaccurate evacuation routes.	We required facilities to provide appropriate programs to ensure egress safety, such as easy evacuation routes in the event of an emergency, legible signs, and clear evacuation plans.
99 facilities had noncompliance in some aspect of their fire prevention, preparedness, and response, such as unmarked fire extinguishers and insufficient fire drills.	We required facilities to make the required changes to their fire detection, prevention, and response systems. We required a regular check of readiness in this area.
75 facilities lacked first-aid supply procedures or did not adequately implement existing procedures to ensure compliance.	We required facilities to implement first-aid procedures and to provide properly supplied first-aid stations in all production areas.

Ergonomics

Apple's Code requires facilities to assess which of its operations pose ergonomic risks to workers—even where not required by law—and to implement risk reduction measures, such as redesigning workstations to facilitate better posture, providing magnifying glasses for close-up work, and rotating workers among tasks to reduce repetitive motion.

Issues	Apple response
50 facilities had not conducted ergonomic risk assessments.	We required facilities to work with qualified professionals to identify which manufacturing operations pose risks of repetitive motion and other ergonomic injuries, to evaluate them, and to take steps to control associated risks.

Core Violations

Our supplier responsibility program discovered the following core violations in the area of worker health and safety. We mandate that suppliers immediately remedy the situations that lead to any core violation. The following chart shows the violations and the actions we required in response.

2011 worker health and safety core violations and actions

Facilities	Violation	Apple Response
2 facilities	Explosions involving combustible dust occurred.	See “Working with Combustible Dust” below for more details.
1 facility	The supplier’s lack of safety measures and environmental controls created unsafe working conditions and significant impact on the environment.	We stopped production until the safety measures were put in place. We required the facility to work with the consultant/expert to conduct a focused investigation to identify the root cause and propose corrective and preventive action plans to prevent recurrence.

Working with Combustible Dust

We were deeply saddened by events at two of our suppliers in 2011. An explosion at Foxconn’s Chengdu factory tragically took the lives of four employees and injured 18 others. An explosion at the Ri-Teng (a subsidiary of Pegatron) factory in Shanghai injured 59.

Immediately after each of these incidents, Apple reached out to the foremost experts in process safety and assembled teams to investigate the circumstances of each explosion. These teams made recommendations about how to prevent future accidents. While the causes of these two incidents—as well as many of the corrective actions taken afterward—were different, both explosions involved combustible dust. Many materials, including ones normally considered noncombustible, can burn rapidly when small particles are suspended in air in the right concentration and ignited. In both of the 2011 incidents, aluminum particles provided fuel for a blast.

Working closely with external experts, Apple audited all suppliers handling aluminum dust and put stronger precautionary measures in place before restarting production. We have established new requirements for handling combustible dust throughout our supply chain, including:

- Specific ventilation requirements with regular testing of airflow velocity
- Comprehensive inspections of ductwork to identify aluminum dust deposits
- Banning the use of high-pressure compressed air for cleaning to lower the possibility of dust clouds forming
- Requiring that all vacuums be rated explosive proof to prevent ignition
- Ensuring that type-D fire extinguishers are available to handle metal fires

At the time of this report, all suppliers except one have implemented the countermeasures identified by the team of external experts. The one supplier that has not will remain shut down until modifications are in place.

Environmental Impact

Apple Supplier Code of Conduct: Environmental impact

The Apple Supplier Code of Conduct requires that suppliers minimize their impact on the environment with responsible practices in the following areas:

- Hazardous substance management
- Wastewater and stormwater management
- Air emissions management
- Solid waste management
- Environmental permits and reporting
- Pollution production and resource allocation

At Apple, we take responsibility for minimizing the environmental impact of our operations and products. We require our suppliers to comply with local laws and regulations and use environmentally responsible manufacturing processes wherever Apple products are made. Our Code requires proper management of hazardous substances, wastewater, air emissions, and solid waste. Suppliers are required to obtain the necessary environmental permits and report on how their practices impact the environment. They must also adhere to local standards for preventing pollution production and work to reduce waste generated from the manufacturing process.

Supplier environmental practices are closely inspected in our standard audit program, but this year we also conducted specialized audits to address concerns at some suppliers.

Specialized Environmental Audits

We engaged globally recognized environmental engineering experts to conduct audits at 14 facilities. Each of these audits included onsite inspections of wastewater treatment facilities, air emissions handling, solid waste disposal, and noise abatement systems both at the facility and in the surrounding areas. The audits also included interviews with local residents. The team reviewed all documentation regarding wastewater, air emission, and noise monitoring records. They also closely inspected hazardous waste removal as well as disposal documentation from the past three years.

Apple recognizes that there is still a lot of work to be done in the area of environmental impact and we are committed to the following actions in the coming year:

- We are expanding the number of specialized environmental audits throughout our supply chain. We are beginning with the highest-risk segments such as printed circuit board manufacturers.
- We are working with both government and nongovernmental organizations to drive improvements in environmental practices throughout our supply chain.
- We are implementing a multilevel training program to drive awareness about environmental issues among employees and suppliers.
- We are encouraging our suppliers to be transparent and disclose their environmental performance to the public. In 2012, we will require suppliers representing more than 90 percent of Apple's final assembly capacity to index their sustainability reports to the Global Reporting Initiative (GRI).

The information below focuses on specialized audit results, issues, and responses in environmental practices.

2011 specialized environmental audit issues and responses

Environmental Permits and Reporting

Apple's Code requires facilities to hold up-to-date permits for air emissions, wastewater discharge, hazardous waste disposal, X-ray equipment, and boundary noise. Facilities must comply with applicable laws requiring an analysis of the environmental impact of their facilities and operations.

In addition to verifying permits and licenses, the auditors evaluated the sources of pollution generated by the facility and carefully reviewed all requirements and applicable standards for pollution controls specified in the environmental impact assessment and pollutant registration.

Issues	Apple response
6 facilities did not update their environmental impact assessment to reflect the latest type of manufacturing they conducted.	We required facilities to immediately engage local government agencies and obtain appropriate approvals and permits.
3 facilities did not have a final inspection approval document upon construction completion and production start.	
2 facilities did not have pollutant registration.	

Wastewater and stormwater management

Suppliers shall monitor, control, and treat wastewater generated from operations as required by applicable laws and regulations before discharge. This covers stormwater as well as sanitary and industrial water.

In the specialized audit, the auditors evaluated the wastewater treatment capability, verified the actual source of pollution, conducted a thorough inspection of the water treatment facility and wastewater discharge method, and reviewed all available wastewater monitoring records from the past three years against the applicable national or local standards.

Issues	Apple response
2 facilities improperly used stormwater drains for industrial wastewater.	We required the facilities to develop corrective action plans and preventive measures such as the following:
3 facilities improperly used stormwater drains for domestic water.	• Investing in expansion of the wastewater treatment facility.
4 facilities discharged amounts in excess of the government-required limit.	• Starting immediate monitoring of wastewater key indicators as required by local agencies.
3 facilities had insufficient wastewater emergency response capacity.	• Modifying wastewater pipes to completely eliminate the mix with stormwater.
5 facilities did not have appropriate wastewater monitoring.	• Developing standard maintenance procedures for wastewater treatment facilities.
2 facilities had insufficient wastewater treatment capacity.	
4 facilities did not regularly maintain their wastewater treatment facility.	

Air emissions management

Apple's Code requires facilities to characterize, monitor, control, and treat air emissions of volatile organic chemicals, aerosols, corrosives, particulates, ozone-depleting chemicals, and combustion by-products generated from operations—as required by applicable laws and regulations—before discharge.

In the specialized audit, the auditors conducted a thorough inspection of the air emission treatment facility and reviewed all available air emission monitoring records from the past three years against the applicable national or local standards.

Issues	Apple response
5 facilities did not have proper maintenance in their air emission treatment facility.	We required facilities to immediately hire professional laboratories and conduct air emission tests. Facilities that weren't appropriately maintained were required to immediately perform maintenance and develop standard maintenance procedures.
4 facilities were not monitoring air emission appropriately.	
1 facility had a considerable level of odor.	

Noise

Suppliers shall characterize, monitor, control, and treat noise generated from operations—as required by applicable laws and regulations.

In the specialized audit, the auditors conducted a thorough inspection of the noise abatement system and reviewed all available monitoring records from the past three years against the applicable national or local standards.

Issues	Apple response
3 facilities had no boundary noise monitoring during the day.	We required facilities to immediately hire professional laboratories and conduct noise tests. Facilities without noise abatement systems were required to use qualified contractors and install such systems.
4 facilities had no boundary noise monitoring at night.	
2 facilities generated high levels of noise without an appropriate noise abatement system.	

Hazardous substance management and restrictions

Apple's Code requires suppliers to comply with the most recent version of Apple's Regulated Substances Specification, 069-0135, and with any applicable laws and regulations prohibiting or restricting specific substances. To ensure safe handling, movement, storage, recycling, reuse, and disposal, suppliers must identify and manage substances that pose a hazard if released to the environment and comply with applicable labeling laws and regulations for recycling and disposal.

In the specialized audit, the auditors conducted a thorough inspection of the hazardous waste storage and handling facilities and reviewed the waste handlers' licenses and all available waste transport manifest forms from the past three years.

Issues	Apple response
5 facilities had no secondary containment and rainshell for hazardous chemical storage.	<p>We required facilities to develop corrective action plans and implementation timelines, including the following measures:</p> <ul style="list-style-type: none"> • Installing proper containment devices for storing hazardous waste. • Using approved professionals to handle the hazardous waste transportation and disposal. • Applying proper labels for each type of hazardous waste. • Developing hazardous waste reduction program.
2 facilities used unauthorized hazardous waste handlers, or the handlers' licenses had not been updated.	
3 facilities had inconsistent waste transport records.	
9 facilities made handling errors including lack of signs of hazardous waste storage, hazardous waste mixed with non-hazardous waste, and mislabeling or miscategorization of hazardous wastes.	
3 facilities produced hazardous waste exceeding the limit set last year.	

Audit Results

Each year, Apple audits suppliers in six areas relating to environmental impact. We look for compliance of both their practices and management systems.

Environmental impact 2011 audit data

Category	Practices in compliance	Management systems in place
Hazardous substance management	68%	66%
Wastewater management	89%	87%
Air emissions management	68%	57%
Solid waste management	90%	90%
Environmental permits and reporting	75%	70%
Pollution prevention and resource reduction	94%	92%
Overall Compliance	79%	76%

Category percentages represent the average across all facilities of the line items scored under that category. Overall Compliance percentages are the average of every line item in every category.

Below are the issues and Apple responses for the standard audits in environmental practices.

2011 environmental audit issues and responses

Hazardous Substance Management and Restrictions	
<p>Apple's Code requires suppliers to comply with the most recent version of Apple's Regulated Substances Specification, 069-0135, and with any applicable laws and regulations prohibiting or restricting specific substances. Facilities must identify and manage substances that pose a hazard if released to the environment and comply with applicable labeling laws and regulations for safe handling, transport, recycling, reuse, and disposal.</p>	
Issues	Apple response
112 facilities were not properly storing, moving, or handling hazardous chemicals. For example, some facilities did not provide antileakage for hazardous chemicals or provide separate storage for incompatible chemicals. Also, 125 facilities lacked management procedures for handling, movement, and storage of hazardous chemicals.	We required facilities to store, move, and handle hazardous chemicals properly; for example, by providing antileakage devices for hazardous chemicals and separate storage for incompatible chemicals. Also, we required facilities to establish adequate management procedures for handling, movement, and storage of hazardous chemicals.
69 facilities were not recycling or disposing of hazardous waste as required by law, while 74 facilities lacked management procedures for recycling or disposing of hazardous waste.	We required facilities to correct their hazardous waste disposal practices; for example, by turning hazardous waste over to qualified vendors and by maintaining documentation to demonstrate compliance with Apple requirements and applicable laws. We also required facilities to strengthen management procedures covering recycling and disposing of hazardous waste.
52 facilities failed to label hazardous waste storage locations and chemical containers, while 72 facilities lacked management procedures for labeling hazardous waste.	We required facilities to label hazardous waste storage locations and chemical containers and to establish adequate management procedures for labeling hazardous waste.

Air emissions management

Apple's Code requires facilities to characterize, monitor, control, and treat air emissions of volatile organic chemicals, aerosols, corrosives, particulates, ozone-depleting chemicals, and combustion by-products generated from operations—as required by applicable laws and regulations—before discharge.

Issues	Apple response
58 facilities failed to monitor and control air emissions. For example, facilities did not inspect discharges regularly to ensure compliance with the local laws, or the air emission outlets were not clearly marked. Also, 77 facilities lacked air emission monitoring and control management procedures.	We required facilities to treat air emissions, to conduct regular inspections to ensure compliance with the law, and to mark clearly all air emission outlets. Also, we required facilities to establish management procedures on air emission monitoring and control.

Core Violations

Our standard and specialized audits uncovered the following core violations. For these facilities, there was a very serious concern about the actual or potential impact on the environment. We mandate that suppliers immediately remedy the situations that lead to any core violation. The following chart shows the violations and the actions we required in response.

2011 environmental core violations and actions

Facilities	Violation	Apple Response
1 facility	A renovated production building had been in use for 1½ years without a proper environmental impact assessment and final inspection approval. The results of wastewater discharge monitoring revealed one key wastewater parameter exceeded the existing approved limit.	We immediately suspended business with this supplier and required the supplier to obtain appropriate agency approval and control and to take control measures to manage the key parameter so it no longer exceeded the limit. At the time we write this report, the environmental impact assessment has been approved and the wastewater control measure is in place. The facility is waiting for the final inspection approval.
1 facility	Auditors found an unauthorized wastewater discharge pipe in the surrounding farm. Monitoring records revealed that the facility had been fined multiple times for directly discharging wastewater and organic gas.	We immediately suspended business with this supplier and required it to remove the unauthorized pipe. We then required the supplier to obtain proper agency approval and complete its pollutant registration. We also required the facility to hire a professional laboratory to conduct wastewater, air emission, and noise testing.
1 facility	The facility had no environmental impact assessment, inspection approval, or pollutant registration. It also had no monitoring results for wastewater, air emission, or noise.	We immediately required the supplier to obtain proper agency approval and complete its pollutant registration. We also required the facility to hire a professional laboratory to conduct wastewater, air emission, and noise testing.
1 facility	The facility had neither proper environmental impact assessment nor a wastewater discharge permit. The audit revealed that both industrial wastewater and air emissions were discharged directly without treatment.	We immediately required the facility to obtain proper agency approval and conduct corrective actions to address the wastewater and air emission concerns.

Ethics

Apple Supplier Code of Conduct: Ethics

The Apple Supplier Code of Conduct requires that suppliers maintain the highest ethical standards throughout their business practices. The Code defines ethical principles and practices in the following areas:

- Business integrity
- Disclosure of information
- Whistleblower protection and anonymous complaints
- Protection of intellectual property

By agreeing to our Code, suppliers commit to maintaining the highest standards of ethical conduct when dealing with their workers, suppliers, and customers. Violations of our guidelines are not tolerated, and can result in immediate termination of our relationship with a supplier, as they have in the past with bribery and falsification of audit materials.

To monitor compliance within the ethics section of our Code, our standard audits include interviews with employees and contract workers about management procedures. We look closely for instances of coaching, in which management has directed workers to provide inaccurate information during audits. We also interview senior management, review documentation, and inspect records and record-keeping processes. An important aspect of any audit is the supplier's willingness to openly disclose records and information about its management procedures.

When we interview workers during an audit, we provide them a hotline card with a telephone number and a case number that identifies the facility and audit date. This enables workers to provide additional information after an audit and to report any adverse consequences of their participation in the audit—without fear of retaliation.

Audit Results

Each year, Apple audits suppliers in four areas relating to ethics. We look for compliance of both their practices and management systems.

Ethics 2011 audit data

Category	Practices in compliance	Management systems in place
Business integrity	97%	87%
Disclosure of information	95%	90%
Whistleblower protection and anonymous complaints	93%	79%
Protection of intellectual property	97%	88%
Overall Compliance	95%	85%

Category percentages represent the average across all facilities of the line items scored under that category. Overall Compliance percentages are the average of every line item in every category.

Core Violations

Our standard audits and special audits uncovered the following core violations in the area of ethics. We mandate that suppliers immediately remedy the situations that lead to any core violation. The following chart shows the violations and the actions we required in response.

2011 ethics core violations and actions

Facilities	Violation	Apple Response
1 facility	Repeated core violation for falsification of audit materials.	We are terminating our relationship with the supplier.
3 facilities	Two facilities presented falsified payroll records and provided misleading interview answers to Apple's audit team. One facility provided a falsified roster with incomplete working hour records and employee profiles to Apple's audit team.	One facility provided real payroll records immediately after the auditors identified the falsification. We required an independent audit at the other facility to review payroll records and to look for additional falsification. We required the facilities to conduct reviews of their ethics management systems and provide appropriate communication and training to all management staff on the prohibitions against falsified records and the consequences of such violations. We terminated our relationship with one supplier.
1 facility	The facility obstructed the Apple audit team's efforts to obtain payroll records.	We required an independent audit to review payroll records and to provide appropriate communication and training to all management staff on the prohibitions of obstruction to Apple audits.
1 facility	The facility coached foreign contract workers with intimidating language.	We required an independent audit to review the facility's recruitment process and look for additional falsification. We required the facility to improve its management systems for foreign contract worker recruitment process and ethics to fully comply with the Apple Supplier Code of Conduct.

Management Systems

Apple Supplier Code of Conduct: Management systems

The Apple Supplier Code of Conduct requires that suppliers' management systems include elements in the following areas, providing a foundation for responsible practices in all other areas of the Code:

- Company statement
- Management accountability and responsibility
- Documentation and records
- Training and communication
- Worker feedback and participation
- Corrective action process

Apple requires that our suppliers establish management systems that ensure compliance with each section of its Code as well as applicable laws and regulations. Suppliers' management systems must be capable of identifying and mitigating operational risks. They should also help suppliers make continuous improvements to their standards and practices. This section of the Code provides a foundation for its other elements: Enforcement of the standards we've defined in the Code's other areas depends on suppliers setting up the right management systems.

Our audit programs examine both business practices and the management systems that can sustain those practices. There may be cases where our audit reveals compliance in actual practice, but the underlying management system may not be strong enough to assure ongoing compliance. For this reason, Apple audits include examination of the management systems—such as policies and procedures, roles and responsibilities, and training programs—underlying every category in our Code.

Training is an important tool we use to call attention to the need for our suppliers to strengthen management systems. Training also empowers workers, raising their awareness to their rights—an important part of our efforts to drive our suppliers to adopt socially responsible management systems and practices.

As part of our audit programs, we follow up to see if training programs result in changes to the workplace. For example, last year, audit scores went up for management systems compliance in underage hiring prevention following the extensive training we delivered.

Audit Results

Each year, Apple audits suppliers in six areas relating to management systems.

Management systems 2011 audit data

Category	Practices in compliance	Management systems in place
Company statement	70%	70%
Management accountability and responsibility	56%	56%
Documentation and records	82%	82%
Training and communication	77%	77%
Worker feedback and participation	87%	87%
Corrective action process	55%	55%
Overall Compliance	68%	68%

Category percentages represent the average across all facilities of the line items scored under that category. Overall Compliance percentages are the average of every line item in every category.

Below are the issues and Apple responses for the standard audits in management systems.

2011 management systems audit issues and responses

Management Accountability and Responsibility

Apple's Code requires facilities to clearly identify company representatives responsible for ensuring implementation and periodic review of the status of the suppliers' management systems.

Issues	Apple response
66 facilities lacked objectives and targets for supplier responsibility and failed to establish procedures to track progress.	We required facilities to establish comprehensive objectives and targets as well as a system to track progress.
74 facilities did not assign appropriate individuals to be responsible for management system operation and maintenance, and as a result did not establish relevant procedures.	We required facilities to establish procedures for assigning appropriate individuals to be responsible for supplier responsibility management system operation and maintenance, and to assign the responsible individuals.
112 facilities lacked adequate procedures for auditing their suppliers and did not perform adequate supplier audits.	We required facilities to establish procedures for auditing their suppliers and to conduct adequate audits.

Corrective action process

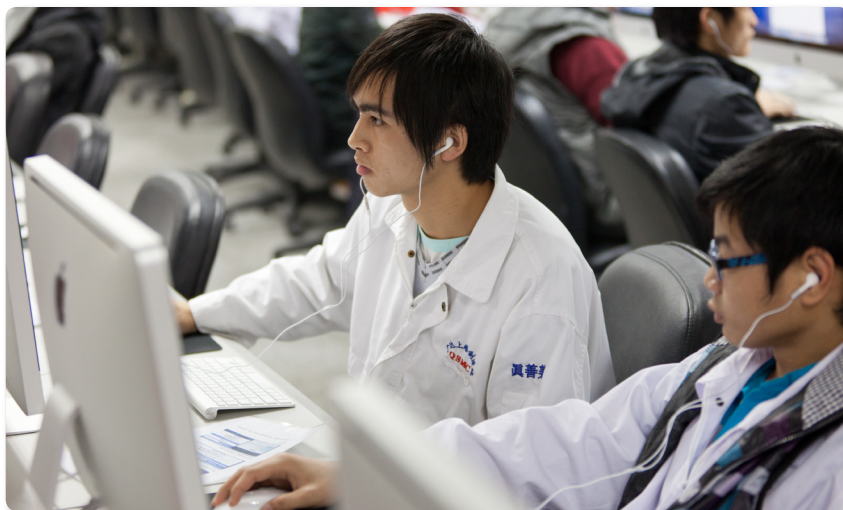
Apple's Code requires facilities to develop a process for timely correction of any deficiencies identified by an internal or external audit, assessment, inspection, investigation, or review.

Issues	Apple response
84 facilities lacked procedures on corrective action processes and failed to develop an adequate corrective action to ensure remediation of the issues identified in supplier responsibility audits.	We required facilities to establish procedures on corrective action processes, and develop adequate corrective actions to address the issues identified in audits, including root cause analysis, corrective actions, preventive actions, deadlines, and responsible party.

Worker Education and Development

Every year, we go beyond the specifics of the Code of Conduct and broaden the reach of our social responsibility training programs to empower workers and make them aware of their rights. Workers, supervisors, and managers who work on creating Apple products at supplier facilities around the world are trained on occupational health and safety, work-related injury and disease prevention, worker rights, and local labor laws. We also train supervisors and managers on their responsibilities to protect workers. Our worker empowerment training started with final manufacturing facilities in 2009, then reached deeper into the supply chain in 2011. Since the program's inception, we have trained a total of one million workers at our final assembly and component suppliers.

We continue to improve the program and have recently reduced class size, increased interactivity, and enhanced coverage of antiharassment, antidiscrimination, and grievance mechanisms. We've also added one-to-one coaching and introduced worker management communications to the training curriculum.



All of our final assembly suppliers now have onsite e-learning centers like this one in Shanghai.

SEED Program Expansion

We've also expanded professional development opportunities for workers through the Supplier Employee Education and Development (SEED) program. This Apple-designed program offers workers classes in topics such as finance, computer skills, and the English language. In addition, SEED programs partner with Chinese universities to allow workers to earn associate degrees.

The program began as a pilot at Foxconn's facility in Shenzhen in 2008 and has expanded to all final assembly sites in 2011. More than 60,000 workers have participated in SEED training. Our evaluation of the program showed that SEED participants have higher morale and are promoted more often than other employees.



The newly opened e-learning center in Shanghai allows workers to gain new skills through the Supplier Employee Education and Development (SEED) program. To date, over 60,000 students throughout our supplier base have taken SEED classes.

For More Information

For more information about Apple's Supplier Responsibility Program, visit www.apple.com/supplierresponsibility